

INTENT Conference papers

Promoting critical thinking in online intercultural communication

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Abstract

This paper investigates the educational experience arising from the use of an online discussion forum in an undergraduate blended learning language programme; to do this, it focuses on the type of cognitive processes that learners experience during a computer-mediated collaborative task and explores the potential causal relationship between the instructional strategies and the students' cognitive activity. Findings indicate that the 'teaching presence' had a significant indirect influence on the outcome of the online intercultural interactions.

Keywords: Computer-Mediated Communication, intercultural interactions, cognitive presence, instructional strategies.

1. Introduction

In Computer-Mediated Communication (CMC), learners have the opportunity to engage in interactive and collaborative activities with their peers in a blended or entirely online setting. Research has shown that some blended-learning models can transform learning in the sense that learners are no longer receivers of information but active constructors of their own learning through interaction in the new media (Bonk & Graham, 2006). The paradigm shift for teachers using Web 2.0 tools involves "rethinking and redesigning the teaching and learning relationship" (Garrison and Kanuka, 2004, p.99) and calls for new teaching-learning practices that extend beyond the familiar classroom boundaries (O'Dowd & Waire, 2009; Dooly, 2010). Comas-Quinn (2011) argues that the success of the introduction of online technologies is "in great part due to how well teachers deal with the new ideas and implement them with their learners" (p.221). The influence of the instructional approach on the learning outcomes was demonstrated by Garrison and Cleveland-Innes (2005) when they found that teaching presence in the form of structure (i.e., design) and leadership (i.e., facilitation and direction) was a key factor for students' deep and meaningful (online) learning.

In light of the recent empirical evidence, this paper seeks to investigate the 'educational experience' arising from the use of an online discussion forum in an undergraduate blended learning language programme; to do this, it focuses on the type of cognitive processes that learners experience during a computer mediated collaborative task and explores the potential causal relationship between the instructional approach and students' (collaborative) learning.

2. Theoretical Framework

The Community of inquiry (CoI) framework developed by Garrison et al. (2001) was used to examine students' cognitive activity as it is specifically designed to analyse online interactions and also, as it is the most widely used framework for A(synchronous) CMC analyses (Arnold, & Ducate, 2006). There are three interdependent structural elements in the framework –social, cognitive and teaching presence; however, only the last two dimensions of the model were considered for this study: the Cognitive presence, which is defined as "the extent to which the participants are able to construct and confirm meaning through sustained reflection and discourse" (Garrison et al., 2001, p.11) and the Teaching presence, which is described as the "the design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (Anderson et al., 2001, p. 5).

3. Methodology

3.1. Project outline

The online discussion forum is integrated in a larger project which promotes a three-phased approach. Language learners have first to select a current French socio-political issue of their choice, retrieve information on the topic from online newspapers and analyse it with a view to producing a piece of work demonstrating thorough understanding of the topic.

The Computer Mediated Communication (CMC) task is an out-of-class activity which starts in week 4 of their 12-week course and runs for 6 to 8 weeks depending on the group dynamic; each L2 learner submits his/her assignment on line and is paired with a native speaker who has expressed an interest in his/her topic. Students then engage in a discussion with their respective partners. At the end of the project, all participants have to reflect and report on their online learning experience.

1. REGARDS SUR L'ACTUALITE/ 25%

Semaines 1 à 3 / **Travail individuel / Recherche sur la presse, via Internet /5%**

- Vous rechercherez plusieurs articles traitant d'un même sujet d'actualité et tirés de journaux/ magazines de différentes tendances -*Le Monde, Le Figaro, Libération, l'Express, la Croix, le Nouvel Observateur, etc.*, les lirez, et les référencerez.
- **Vous sélectionnerez un seul de ces articles et l'analyserez** –sous forme de commentaire– certaines prises de position du journaliste (2 au minimum/ 250 mots environ)

2. ECHANGES D'OPINION SUR L'ACTUALITE

Semaines 4 à 10 / **Travail en tandem avec un(e) francophone /15%**

Discussion en ligne sur SULIS 1 contribution par semaine

- **Vous mettrez votre commentaire sur le forum de discussion**
- Vous choisirez l'un des points controversés que vous aurez abordés pour en discuter avec votre correspondant(e) et, pour lancer la discussion, **vous soumettrez une question qui sera postée sur le forum**, à la suite de votre commentaire.
- **Vous lirez les réactions** –à vos affirmations– de votre partenaire.
- **Vous défendrez vos arguments et en avancerez de nouveaux.**

3. AUTRE PERSPECTIVE SUR L'ACTUALITE

Semaines 11 & 12 / **Travail individuel /5%**

Suite à vos interactions –en ligne– avec un(e) francophone, (1) vous expliquerez si et de quelle façon, votre regard/ perspective sur la question d'actualité étudiée, a changé (150 mots environ) et (2) vous évalueriez la valeur (ajoutée) de l'échange en ligne (150 mots environ).

Figure 1. Project outline.

3.2. Participants' profile

A total of 16 Irish undergraduate students and 16 native speakers of French participated in the project. The Irish students -11 female and 5 male students- were between 21 and 22 years of age and were enrolled on a Fourth Year undergraduate Business and French course; the French module represents 1/5 of their programme and four contact hours per week. All Irish students had taken part in a collaborative Blog the previous year. The native speakers (NS) -12 female and 4 male students- were on-campus Erasmus students; they came from French or Belgian universities and were enrolled in a translation class taught by the present researcher. They were unknown to their Irish partners.

3.3. Task description

The discussion forum was set-up on the Learning Management System (LMS) of the institution for their specific module. In this case, the LMS is called *Sulis* and is powered by Sakai. Prior to the start of the exchanges, a discussion thread was created for each topic/each dyad to facilitate both students and native speakers' assignment and not to burden participants with irrelevant information (see Figure 2 for the list of topics). The Erasmus Students - who were not familiar with an institutional virtual learning environment - were given a 30 minute training session on how to access, use and maximise the forum. The asynchronous communication task was open and not prescriptive, the only clear requirements being that the Irish students' target language (French) was used at all times in the exchanges and that a minimum of six messages were posted by each participant over the course of the on-line task with no constraint of frequency or length.

The screenshot shows the 'Sulis' LMS interface for 'FR4927 SEM1 2012/3'. The left sidebar contains navigation links for Communication, Course Tools, and Site Management. The main content area displays a 'Class Discussions' table with the following data:

Topic	Posts	Author	Last message	Check All / Uncheck All
La mode : un vecteur de sociabilité chez les jeunes européens	13	AOIFE GRAHAM	01/03/2013 03:54:47 PM MANON IFRAH	<input type="checkbox"/>
La crise de la zone euro et son influence sur le reste du monde.	12	RICHARD FOGARTY	12/24/2012 02:11:34 PM RICHARD FOGARTY	<input type="checkbox"/>
Vingt ans après Maastricht	16	MALACHY FAHEY	12/20/2012 08:52:13 PM MALACHY FAHEY	<input type="checkbox"/>
Débat sur le mariage homosexuel	18	MARIA TRACEY	12/20/2012 04:13:21 PM LUCILLE BOIRIE	<input type="checkbox"/>
Les fans français d'Apple risquent d'être déçus.	10	BRYAN KELLEHER	12/14/2012 11:06:07 AM BRYAN KELLEHER	<input type="checkbox"/>
Charlie Hebdo, provocation à la haine?	10	ALAN REILLY	12/13/2012 11:00:33 PM ALAN REILLY	<input type="checkbox"/>
La prostitution et la protection des femmes	14	ANNE RUTHERFORD	12/13/2012 02:38:37 PM VERGINIE MOINE	<input type="checkbox"/>
Le multilinguisme au Parlement européen	15	CLODAGH TEAHAN BURKE	12/12/2012 06:14:09 PM GEORGIA NICOLINI	<input type="checkbox"/>
L'élève français, ce cancre en langues étrangères	15	CIARA HALLIDAY	12/09/2012 07:23:14 PM DIANE FINELLE	<input type="checkbox"/>
Comment boit-on en Europe?	16	KEVIN LYONS	12/09/2012 11:32:48 AM EDWIGE DAUSEND	<input type="checkbox"/>
Sentiment de rejet de l'Union européenne?	11	JULIA BAUSEN	12/07/2012 08:11:17 PM PATOU CISSE	<input type="checkbox"/>
La question sociale dans la crise de l'Europe	17	MELANIE CARROLL	12/05/2012 11:17:34 PM STEPHANE MURUSIAH	<input type="checkbox"/>

Figure 2. Topics of discussion (snapshot of the virtual platform).

As previously mentioned, the Irish students had to post their project work on the discussion forum and start the exchange by asking their Erasmus partner a

(controversial) question on their chosen topic. Participants were free to express their views and opinions and the dialogue was not restricted to the topic selected. Students could also read other dyads' postings but could not join their conversation.

In the closing stages of the project, students were asked to give their overall impression of the online exchange experience and explain whether or not they had changed their views on the topic after their online exchange. It is important to note that even though the teacher/moderator involved in the project had full access to students' postings, she never directly intervened in the exchanges. Any communication with the participants (technical support, gentle reminders to maintain momentum etc.) was carried out via email.

The assessment of the online task is an integral part of the whole project.

4. Results and discussion

The data analysed in this study was obtained through students' postings (188 messages in total – average length: 250 words) and students' feedback collected from two sources: i) students' comments on the exchange (as part of the overall project and completed by all students), ii) students' questionnaire (administered two weeks after the end of the project and completed by 7 Irish students and 8 Erasmus students (7 French students and 1 bilingual Italian-French student).

A transcript analysis of the 6 (to 8) weeks of interactions -in the 16 dyads- was conducted to examine students' level of cognitive presence using coding indicators from 'The Four-Phase Practical Inquiry model', as delineated in Garrison, Anderson, and Archer (2001) conceptual framework. The four phases of developing cognitive presence capture students' thinking processes in the postings and assess their progress (or lack thereof) of their cognitive presence from lower to higher-order thinking. Figure 3 illustrates each phase of the model with examples taken from the current study. During Phase 1, students were able to identify problems and ask questions for further discussion, while in Phase 2, they exchanged ideas and discussed ambiguities. In Phase 3, students began to connect ideas to construct new meanings, often incorporating information from other sources and finally, in Phase 4, students were able to apply new ideas or to critically assess and defend solutions.

Descriptor/ Indicator	Sociocognitive processes	Example
Phase 1/ Initiation Phase	Identifying potential problems/ Asking questions to prompt more discussions	Qu'est ce <i>qu'être Européen</i> si nous Français ne nous considérons pas Européen. [...] Lors de cette journée, une question a été posé: vous sentez vous Européen? La plupart des personnes interrogées ont répondu que non. Penses-tu qu'une société européenne soit un jour possible? Et surtout y serais tu favorable? (<i>Mégane</i> - French student)
Phase 2/ Exploration Phase	Exchanging ideas Discussing ambiguities Offering suggestions	Pour répondre à tes questions: Je suis d'accord avec tout ce que tu as dit. Cependant, je crois que c'est plus compliqué que ça. Personnellement, je trouve que la société européenne commence devenir une possibilité avec nous, les jeunes. Notre génération est la première à se voir comme des européens. À mon avis, c'est à travers des programmes tels qu'Erasmus et des stages européens que nous travaillerons à cette idée d'une société européenne. (<i>Malachy</i> - Irish student)

Phase 3/ Integration Phase	Connecting ideas to construct new meanings/ Incorporating information from other sources Creating solutions	Je serais très favorable à une société européenne dans l'avenir parce que je l'ai déjà vue en quelques sortes à Luxembourg. J'ai lu un article qui parle de Luxembourg comme un modèle pour l'Europe et je pense que tu le trouveras très intéressant: Le multiculturalisme luxembourgeois-un modèle pour l'Europe? - Europaforum Luxembourg - Novembre 2008 (Malachy)
Phase 4/ Resolution Phase	Applying new ideas Critically assessing and defending solutions Taking direct or vicarious action	Je crois que Erasmus est la clé de la future société européenne, elle encourage et crée un amour pour l'Europe en nous [...] Si le financement est arrêté, nous allons perdre tout le travail Erasmus a fait jusqu'à présent. Bien sûr, nous pouvons faire quelque chose. Il y a beaucoup de pétitions en ligne! J'ai déjà signé un et je te recommande de le faire aussi! Si on met suffisant la pression sur le parlement européen, je crois que nous pouvons faire une différence. (Malachy)

Figure 3. Four-Phase Practical Inquiry Model (adapted from Garrison et al., 2001).

The distribution of percentages for each category of cognitive presence shows that the integration phase was achieved by all dyads (16/16) and the resolution phase, by nearly half of the dyads (7/16). These findings suggest that students had progressed into higher- level thinking processes and were engaged in critical reflection; they concur with those of Akyol and Garrison (2011) where 'the integration phase was found to be the most active' (p.244).

The analysis of students' comments (in the reflection task) also indicates that students (Irish and Erasmus) held high perceptions of the learning. In their comments, strong cognitive presence was related to the challenging and engaging dimension of the intercultural online communication. One Erasmus student stressed the intellectual dimension of the online exchanges:

Le dialogue [en ligne] est constructif. Il permet l'ouverture d'esprit, la confrontation de deux façons de pensées. J'estime que cet échange a surtout eu une dimension intellectuelle, outre sa qualité interculturelle.

[The dialogue (on line) is constructive. It allows the broadening of the mind, the confrontation of two ways of thinking. I believe that this exchange had especially an intellectual dimension, in addition to its intercultural value] (Erasmus Student S)

Another student referred to the development of critical reflection:

Nous avons aussi parlé sur le système éducatif, l'avortement. Ça m'a permis de réellement réfléchir sur ces questions sociétales. Mon regard sur tous ces sujets a changé.

[We also spoke on the education system, abortion. It enabled me to truly reflect on these social issues. My perspective on them has evolved] (Irish Student M)

Interestingly, in the feedback questionnaire, 71% of the Irish participants (5 out of 7 students) agreed or strongly agreed that the online task was *intellectually* challenging while 86% of French participants (6 out of 7 students) agreed or strongly agreed that it was *inter-culturally* challenging. The results for the Irish students can be explained in part by the fact that in the previous year, they had spent six months in France, Belgium

or Luxembourg either for a study-abroad period or for work experience and thus, they might have felt that they 'knew' the target language culture.

5. Pedagogical implications

On the strength of the above findings, it could be argued that a number of instructional strategies may have impacted on students' levels of participation and cognitive interactions. Since the instructor/teacher did not comment on the discussion board, her 'teaching presence' fell under the category of "instructional management" as defined by Anderson et al. (2001, p. 5).

Her teacher's role, in terms of course design, required: i) the careful structuring and integration of the online task, ii) the clarity of the instructions and the marking criteria, and iii) the shared access to previous year online discussion forum; it was felt that this step by step process of engaging students would help them develop a common understanding of the task learning goals and potential learning outcomes (Brindley et al, 2009).

Furthermore, the teacher gave students a chance to have personal and 'real' control over the online task:

- by allowing them to select and research their own topics of interest rather than working from a teacher-determined list of topics (Curtis & Lawson, 2001)

I chose that topic because it affects me directly. (French student)

- by involving students in a cognitively challenging real-world activity (Helm, 2013)

It was the first time that I could debate on socio-political issues with a native speaker: a 'real' challenge. (Irish student)

- by encouraging students to take more responsibility for their collaborative learning (Hanna & de Nooy, 2003; 2009)

I was motivated to post messages because my work had a direct effect on her work and grade. (Erasmus student)

Similar to several CMC research studies, the teacher who had a decisive role in the design and implementation of the task became less active -and more 'responsive'- during the actual performance of the task (Shea et al, 2010). Thus, it can be stated that the instructor had an *indirect*, albeit significant, influence on the outcome of the discussions (Arnold & Ducate, 2006).

6. Limitations and conclusion

The findings presented in this paper are to be taken cautiously due to the relatively small number of participants (32), the nature of the data (i.e., the study is partly based on self-reported perceptions of students), and given the context in which the asynchronous online communication took place (i.e., the participants were university students, quite motivated, with an intermediate to high level of French). Nonetheless, the present study adds to a growing body of research on the added value of CMC on language students' educational experience. It underlines some affordances of an online discussion forum, namely, providing a challenging and 'real' learning space where undergraduate students can develop their critical thinking skills as well as improve their linguistic and intercultural competence. More specifically, results from this study give further evidence that overt teacher facilitation is not always necessary to support students' advanced cognitive learning (Shea et al., 2010), and thus encourage other language teachers to assess their unique context (Levy & Stockwell, 2006) and establish their online teaching presence accordingly.

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